



UNITED STATES PATENT AND TRADEMARK OFFICE

7.9
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,957	08/09/2001	Lise Wiseman	12587-008001	5383

26212 7590 01/12/2007
FISH & RICHARDSON P.C.
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

ZHEN, LI B

ART UNIT	PAPER NUMBER
----------	--------------

2194

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/927,957

Applicant(s)

WISEMAN ET AL.

Examiner

Li B. Zhen

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/02/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 48 are pending in the application.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 2194

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1 – 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,721,779 to Maffeis in view of U.S. Patent No. 6,959,340 to Najmi.

7. As to claim 1, Maffeis teaches the invention substantially as claimed including a method of exchanging information among applications [a system for the delivery of data between applications; col. 1, line 55 – col. 2, line 10], the method comprising:

providing a plurality of transformers [protocol adapter 2a, 2a', 2a" at the client side and received by a protocol adapter 1a, 1b, 1c, 1d, 1e, 1f or 1g at the proxy side; col. 4, line 63 – col. 5, line 6], each transformer corresponding to a unique format [protocol adapters encapsulate at least one logic needed to: Interface with a transport protocol, such as HTTP, WAP or GSM Data; col. 4, lines 26 – 32];

using a first transformer to transmit a data object in a common format [protocol adapters allow the message proxy to send and receive messages to and from message clients using arbitrary wireless protocols; col. 3, lines 4 – 23];

publishing the common format data object to a communication channel [client sends to the proxy only the JMS message and the code information related with the topic; col. 3, line 47 – col. 4, line 3], the channel being selected on the basis of the data object [a topic T can, depending on the application, denote a stream of stock quotes, of sports news, or denote a transmission channel; col. 5, line 36 – 50];

subscribing to the communication channel to retrieve the published common format data object [When a JMS message is received on a topic or queue the proxy 1 is subscribed to on behalf of the client, the proxy creates a message token containing the data of the JMS message. The message token is then sent to the client 2 using wireless communication; col. 5, lines 13 – 21]; and

using a second transformer to send the data object to a second application [For that the token is sent via a protocol adapter 1a, 1b, 1c, 1d, 1e, 1f or 1g at the proxy side, and received by the protocol adapter 2a, 2a', 2a" at the client side; col. 5, lines 13 – 21]. Although Maffeis teaches protocol adapters, Maffeis does not specifically disclose the protocol adapter corresponding to a unique transformation from one format into another, a first transformer to transform a data object from a format understandable by a first application into a common format data object, and a second transformer to transform the common format data object into a format understandable by a second application.

However, Najmi a method of exchanging information among applications [messenger provides for B2B integration between J2EE based businesses and its partners; col. 4, lines 25 – 39], a plurality of transformers [message adapter 408....a partner adapter unit 414; col. 8, lines 20 – 39], each transformer corresponding to a unique transformation from one format into another [message adapter 422 is capable of converting an XML based document into a Java based document, or in some cases, to another XML document; col. 8, lines 38 – 57], a first transformer to transform a data object from a format understandable by a first application into a common format data object [a message adapter to convert the JMS message to a format consistent with the

Art Unit: 2194

receiving partner; col. 9, lines 35 – 63], and a second transformer to transform the common format data object into a format understandable by a second application [partner adapter sends the message to the partner using a partner appropriate transport protocol; col. 9, lines 35 – 63].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Maffeis to include the features of protocol adapter corresponding to a unique transformation from one format into another, a first transformer to transform a data object from a format understandable by a first application into a common format data object, and a second transformer to transform the common format data object into a format understandable by a second application because this provides a business to business messenger arranged to provide a reliable communication link between an e-business entity in the form of an enterprise computer system and an associated partner [col. 3, line 62 – col. 4, line 21 of Najmi].

8. As to claim 18, Maffeis as modified by Najmi teaches facilitating the exchange of information among applications [col. 1, line 55 – col. 2, line 10 of Maffeis], the method comprising:

receiving a data object [JMS message and the code information; col. 3, line 47 – col. 4, line 3 of Maffeis] from a first application [client; col. 3, line 47 – col. 4, line 3 of Maffeis];

Art Unit: 2194

using a first controller to route the received data object to a first transformer [first B2B messenger 602 is sending a message to the second B2B messenger 604; col. 9, lines 25 – 36 of Najmi];

using the first transformer to transform the data object from a first format [col. 3, lines 4 – 23 of Maffeis] used by the first application into a common format object [a message adapter to convert the JMS message to a format consistent with the receiving partner; col. 9, lines 35 – 63 of Najmi];

publishing the common format object to a communication channel [client sends to the proxy only the JMS message and the code information related with the topic; col. 3, line 47 – col. 4, line 3 of Maffeis];

receiving a request from a subscribing application to subscribe to the communication channel [When a JMS message is received on a topic or queue the proxy 1 is subscribed to on behalf of the client, the proxy creates a message token containing the data of the JMS message. The message token is then sent to the client 2 using wireless communication; col. 5, lines 13 – 21 of Maffeis];

using a second controller to route the common format object to a second transformer [a first B2B messenger 602 (such as e-business 102) is in direct communication with a second B2B messenger 604; col. 9, lines 15 – 36 of Najmi];

using the second transformer [col. 5, lines 13 – 21 of Maffeis] to transform the common format object into a data object in a second format used by the subscribing application [partner adapter sends the message to the partner using a partner appropriate transport protocol; col. 9, lines 35 – 63 of Najmi]; and

Art Unit: 2194

sending the data object in the second format to the subscribing application [For that the token is sent via a protocol adapter 1a, 1b, 1c, 1d, 1e, 1f or 1g at the proxy side, and received by the protocol adapter 2a, 2a', 2a" at the client side; col. 5, lines 13 – 21 of Maffeis].

9. As to claim 28, Maffeis as modified by Najmi teaches a system for facilitating the exchange of information among applications [col. 1, line 55 – col. 2, line 10 of Maffeis], the system comprising:

a plurality of digital computers [enterprise computer system type e-business 102 capable of reliably (and asynchronously) communicating with any number of associated partners; col. 5, lines 1 – 16 of Najmi], each of which executes application [enterprise-level applications; col. 6, lines 26 – 47 of Najmi], each application being configured to exchange information representative of business events with other applications [subscription rule provides a B2B contract between a sending party and a receiving party in that it identifies a particular type of document (such as a purchase order), a particular format of the document associated with a particular partner (or partners); col. 8, lines 1 – 21 of Najmi]; and

an integration hub in a data communication with each of the digital computers for enabling transfer of information representative of business events between applications [messenger provides for B2B integration between J2EE based businesses and its partners; col. 4, lines 25 – 39 of Najmi], the integration hub including a computer-

Art Unit: 2194

readable medium [col. 11, lines 13 – 40 of Najmi] on which is encoded instructions for causing the computer to define

a plurality of process models each defining one or more conditions for sending a business event from an application to one or more other applications [subscription rule provides a B2B contract between a sending party and a receiving party in that it identifies a particular type of document; col. 8, lines 1 – 21 of Najmi];

a shared object model configured to store data objects received from applications in a common format [communication between message client and message proxy is according to the familiar publish/subscribe or point-to-point model of JMS; col. 4, lines 15 – 22 of Maffeis];

a plurality of transformer [protocol adapter 2a, 2a', 2a" at the client side and received by a protocol adapter 1a, 1b, 1c, 1d, 1e, 1f or 1g at the proxy side; col. 4, line 63 – col. 5, line 6 of Maffeis] classes [protocol object; col. 3, lines 5 – 23 of Maffeis] configured to translate data object from a format used by one or more applications into the common format or vice versa [a message adapter to convert the JMS message to a format consistent with the receiving partner; col. 9, lines 35 – 63 of Najmi]; and

a plurality of controller classes configured to route data objects to associated transformer classes [a first B2B messenger 602 (such as e-business 102) is in direct communication with a second B2B messenger 604; col. 9, lines 15 – 36 of Najmi].

10. As to claim 38, this is similar in scope to claim 18; therefore, this claim is rejected for the same reasons as claim 18 above.

11. As to claim 2, Maffeis as modified by Najmi teaches the data object corresponds to one or more of a plurality of business events [col. 8, lines 1 – 21 of Najmi].

12. As to claim 3, Maffeis as modified by Najmi teaches using the first transformer to transform the data object from the format understandable by the first application into the common format data object comprises translating the data object from a vendor-specific format associated with the first application to an Interface Data Language (IDL) object and storing the IDL object in a shared object model [document template, or B2B schema; col. 8, lines 20 – 39 of Najmi].

13. As to claim 4, Maffeis as modified by Najmi teaches the shared object model comprises a central repository of data objects corresponding to business events [col. 4, lines 15 – 22 of Maffeis].

14. As to claim 5, Maffeis as modified by Najmi teaches using a first transformer to transform the data object from the format understandable by the first application into the common format data object [col. 9, lines 35 – 63 of Najmi] is performed in response to a recognition of a business event by the first application [col. 8, lines 1 – 21 of Najmi].

Art Unit: 2194

15. As to claim 6, Maffeis as modified by Najmi teaches that the method is performed in accordance with a plurality of process models that collectively define when information is to be exchanged among applications [col. 8, lines 1 – 21 of Najmi].

16. As to claim 7, Maffeis as modified by Najmi teaches publishing the common data format object to a communications channel is performed by a source connector and subscribing to the communication channel is performed by a target connector [col. 9, lines 35 – 63 of Najmi].

17. As to claim 8, Maffeis teaches publishing the common format data object to a communication channel is performed in accordance with a channel architecture that defines a plurality of communication channels having relative priorities [col. 5, lines 35 – 51].

18. As to claim 9, Maffeis as modified by Najmi teaches using the second transformer to transform the common format data object into the format understandable by the second application comprises retrieving a stored Interface Data Language (IDL) format object and translating the IDL object into a vendor-specific format associated with the second application [document template, or B2B schema; col. 8, lines 20 – 39 of Najmi].

Art Unit: 2194

19. As to claim 10, Maffeis as modified by Najmi teaches information is exchanged among business support systems or operational support systems or a combination thereof [enterprise computer system type e-business 102 capable of reliably (and asynchronously) communicating with any number of associated partners; col. 5, lines 1 – 16 of Najmi].

20. As to claim 11, Maffeis teaches at least one of the transformers comprises a class defined in an object-oriented programming language [protocol object; col. 3, lines 5 – 23].

21. As to claim 12, Maffeis as modified by Najmi teaches a controller that is configured to route data objects to an associated transformer [col. 9, lines 15 – 36 of Najmi].

22. As to claim 13, Maffeis as modified by Najmi teaches routing a data object to the first transformer using a first controller [col. 9, lines 15 – 36 of Najmi].

23. As to claim 14, Maffeis as modified by Najmi teaches routing the common format data object to the second transformer using a second controller [col. 9, lines 15 – 36 of Najmi].

Art Unit: 2194

24. As to claim 15, Maffeis as modified by Najmi teaches at least one of the controllers comprises a class defined in an object-oriented programming language [col. 9, lines 15 – 36 of Najmi].

25. As to claim 16, Maffeis as modified by Najmi teaches an acknowledgement class to exchange status messages among applications [col. 9, lines 24 – 36 of Najmi].

26. As to claim 17, Maffeis as modified by Najmi teaches using the acknowledgement class to perform exception handling [col. 7, lines 16 – 36 of Najmi].

27. As to claims 19 – 23 and 25 – 27, these are similar in scope to claims 2 – 6 and 8 – 10; therefore, these claims are rejected for the same reasons as claims 2 – 6 and 8 – 10 above.

28. As to claim 24, Maffeis as modified by Najmi teaches if requests are received from a plurality of subscribing applications, then, for each subscribing application, the common format object is transformed using an associated transformer into a format corresponding to the subscribing application and sent to the subscribing application [col. 8, lines 1 – 21 of Najmi].

Art Unit: 2194

29. As to claim 29, Maffeis teaches a channel architecture defining a plurality of communication channels to which data objects from an application are to be published [col. 5, lines 35 – 51].

30. As to claims 30 – 32, these are similar in scope to claims 8, 16 and 17; therefore, these claims are rejected for the same reasons as claims 8, 16 and 17 above.

31. As to claim 33, Maffeis as modified by Najmi teaches each process model corresponds to a different business event [col. 8, lines 1 – 21 of Najmi].

32. As to claim 34, Maffeis as modified by Najmi teaches the shared object model comprises a central repository of data objects in an Interface Description Language (IDL) format [col. 8, lines 20 – 39 of Najmi].

33. As to claim 35, Maffeis as modified by Najmi teaches each transformer class corresponds to a unique application format-common format translation [col. 9, lines 35 – 63 of Najmi].

34. As to claim 36, Maffeis as modified by Najmi teaches each controller class [col. 9, lines 25 – 36 of Najmi] is configured to route data objects to an associated transformer class according to a process model [col. 8, lines 1 – 21 of Najmi].

Art Unit: 2194

35. As to claim 37, this is similar in scope to the combination of claims 11 and 15; therefore, this claim is rejected for the same reasons as claims 11 and 15 above.

36. As to claim 39, Maffeis as modified by Najmi teaches the machine-readable instructions comprise computer software instructions executable by one or more computer systems [col. 11, lines 13 – 40 of Najmi].

37. As to claims 40 – 48, these are similar in scope to claims 19 – 27; therefore, these claims are rejected for the same reasons as claims 19 – 27 above.

CONTACT INFORMATION

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

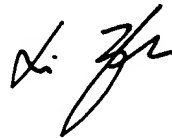
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2194

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen
Examiner
Art Unit 2194

LBZ


1/7/2007